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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/772,259	12/23/1996	KAYOKO MASAKI	1185.1018/JD	5740
21171	7590	09/22/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			NGUYEN, THONG Q	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

08/772.259

Applicant(s)

MASAKI ET AL.

Examiner

Thong Q. Nguyen

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2005 and 12 September 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6 and 9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 8/15/2005 has been entered.

Response to Amendment

2. The present Office action is made in response to the pre-amendments filed on 8/15/05 and 9/12/05. It is noted that in the amendment of 8/15/05, applicant has amended claim 4 and canceled claims 7 and 10-11.

The pre-amendment of 9/12/05 is filed by the applicant in response to the notice of non-compliant mailed by the Office on 8/25/05. In this pre-amendment, applicant has provided a list of claims which listed all of the claims.

The application after amended now contains claims 4-6 and 9 and examined in this Office action. Noted that claims 1-3 and 8 were canceled by the amendment of 10/3/2001.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2872

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4-6 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

a) Claim 4 is rejected under 35 USC 112, first paragraph because the disclosure, as originally filed, does not provide support for the device as claimed. In particular, the disclosure, as originally filed, does not provide supports for the following features. First, the feature thereof "said prismatic surface....light guide plate" as recited on lines 14-17 and Second, the feature thereof "wherein only the second....light control element" recited on lines 18-24.

Regarding to the feature related to the formation of the slopes of the prism surface of the light control element as recited in the feature thereof "thereof "said prismatic surface....light guide plate" (lines 14-17), it is noted that the specification, in particular, pages 4 (lines 7-15) and 10 (lines 7-16), does not provide support for the feature claimed. Applicant should note that each of the projections formed on the prism surface has two slopes in which one slope is a light source side slope and the other slope is an exiting slope which is opposite to the light source side slope. The specification has never disclosed that the two slopes of each projections are "first slopes being directed to said incident end

face of the light guide plate and said second slopes being directed oppositely to said incident end face of the light guide plate” as recited on lines 16-17 of the claim.

Regarding to the feature related to the formation of the diffusible surface as recited in the feature thereof “wherein only the second...light control element” (lines 18-20). It is noted that the specification has never disclosed that the second slope(s) is the diffusible surface as claimed. Applicant is respectfully invited to review the specification, in particular, pages 12-13 and figs. 6-8. In other words, in the embodiment described in pages 12-13 and shown in fig. 6, the diffusible surface is formed on the first slope, not the second slope. In the embodiments as described in page 13 and shown in figs. 7-8, both the first and second slopes are diffusible slopes.

Regarding to the function of the diffusible surface on one of the slopes of the projections formed on the prismatic surface, the specification has never disclosed the function thereof “wherein only the second...light control element” (lines 18-24). Applicant is respectfully invited to show which section of the present application as originally filed provides support for the function of the diffusible surface as claimed. Applicant is respectfully invited to review the specification, in particular, pages 2-3 and 9-11 which discloses that the light guide plate 92) is a scattering light guide plate. The light emitted from the light guide plate (2) is clearly a scattered light before it enters the light control element (12). The use of diffusible surfaces on the slopes of each projections of the prismatic surface of

the light control element is for the purpose of providing the light emitting surface of the light control element a substantially uniform and reducing the effects of the light reflecting element.

b) The remaining claims are dependent upon the rejected base claim and thus inherit the deficiencies thereof.

5. Claims 4-6 and 9 are rejected under 35 U.S.C. 112, first paragraph, for the following reasons.

a) Claim 4 is rejected under 35 USC 112, first paragraph because the specification, while being enabling for making the first slope or the second slope or both slopes of each projections of the prismatic surface of the light control element as diffusible surface(s), does not reasonably provide enablement for using only the second slope of each projections of the prismatic surface of the light control element as diffusible surface. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

b) The remaining claims are dependent upon the rejected base claim and thus inherit the deficiency thereof.

6. Claims 4-6 and 9 are rejected under 35 U.S.C. 112, first paragraph for the following reasons.

a) Claim 4 is rejected under 35 USC 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in

Art Unit: 2872

the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

First, the specification, in particular, pages 4 (lines 7-15) and 10 (lines 7-16), does not provide support for the feature thereof "thereof "said prismatic surface....light guide plate" as claimed on lines 14-17 of the claim. Applicant should note that each of the projections formed on the prism surface has two slopes in which one slope is a light source side slope and the other slope is an exiting slope which is opposite to the light source side slope. The specification has never disclosed that the two slopes of each projections are "first slopes being directed to said incident end face of the light guide plate and said second slopes being directed oppositely to said incident end face of the light guide plate" as recited on lines 16-17 of the claim.

Second, regarding to the function of the diffusible surface on one of the slopes of the projections formed on the prismatic surface, the specification has never disclosed the function thereof "wherein only the second...light control element" (lines 18-24). Applicant is respectfully invited to show which section of the present application as originally filed provides support for the function of the diffusible surface as claimed. Applicant is respectfully invited to review the specification, in particular, pages 2-3 and 9-11 which discloses that the light guide plate 92) is a scattering light guide plate. The light emitted from the light guide plate (2) is clearly a scattered light before it enters the light control element (12). The use of diffusible surfaces on the slopes of each projections of the

prismatic surface of the light control element is for the purpose of providing the light emitting surface of the light control element a substantially uniform and reducing the effects of the light reflecting element.

b) The remaining claims are dependent upon the rejected base claim and thus inherit the deficiencies thereof.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 4-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art described at pages 1-5 and illustrated in figures 11-12 in view of Ishikawa et al (Patent No. 5,600,455, of record).

The optical device as provided by the prior art which is described in the present specification at pages 1-5 and illustrated in figs. 11-12 comprises 1) a light source apparatus having a lamp (7) and a reflector (8); 2) a light guide plate (2) having a light entrance surface (T) for receiving light from the light source apparatus, an exit surface and an inclined surface inclined so that the light guide plate gradually decreases away from the light entrance surface in thickness; 3) a reflecting plate (4) disposed adjacent to the inclined surface of the light guide plate (2); and 4) a light control plate (5) having an emitting surface and an entrance surface having a prismatic configuration which entrance surface faces the exit surface of the light guide plate (2). It is also noted that the light control plate (5) comprises the following features: First, the prismatic configuration

comprises a plurality of triangular-shaped projections which are extended in one common direction and repeatedly arranged in a direction perpendicular to the mentioned common direction. It is noted that each triangular-shaped projections of the prismatic configuration formed on the entrance surface of the light control plate comprises a first slope which is a light source side slope and the second slope which is an exiting slope being opposite to the light source side slope; and second, the emitting surface of the light control plate is spaced from the entrance surface of the light control plate as can be seen in figures 11-12.

As a result of such a structure, the optical device of the prior art meets almost the structure of the device as claimed in the present application. However, the optical device of the prior art does not disclose that only part of the slopes, i.e., the second slope, of each prism of the prismatic configuration of the light control plate defines a diffusing surface for the purpose of generating diffused light in a substantially uniform manner and simultaneously reducing the effects of the reflecting plate.

Regarding to the feature that the only second slope is a diffusible surface as claimed in the newly-added material to the claim, such feature is a new matter to the application as originally filed and subjected to a number of rejections under 35 USC 112, first paragraph as set forth in this Office action and further is not critical to the invention as admitted by the applicant in the present specification. The support for that conclusion is found in the present application in pages 12-13 and figs. 6-8. In other words, in the embodiment described in pages 12-13 and

shown in fig. 6, the diffusible surface is formed on the first slope, not the second slope. In the embodiments as described in page 13 and shown in figs. 7-8, both the first and second slopes are diffusible slopes.

It is also noted that the use of a light control plate having a prismatic configuration wherein only part of the slopes of each prism constituting the prismatic configuration is made as a roughed surface which defines a diffusing surface is disclosed in the art as can be seen in the light control device disclosed by Ishikawa et al. In particular, Ishikawa et al disclose a light control plate and teach the use of a light diffusing profile on a prismatic surface. The roughened pattern formed on one slope of each triangular-shaped projection as provided by Ishikawa et al will diffuse the light passing through the projection. See column 3 and figure 7. It is also noted that the formation of only one part of the slopes of each prism as suggested by Ishikawa et al is for the purpose of providing a uniform pattern of light in comparison with the use of prismatic configuration of the prior art. See columns 1-2 and figures 1-5 in which Ishikawa et al disclose that since the slope(s) of each prism of the prismatic configuration is/are not sloped; therefore, the optical device of the prior art does not provide a uniform pattern when the view of an observer is angled with respect to the optical device. The formation of roughed surface on at least one part of the slope of each prism as suggested by Ishikawa et al will overcome the disadvantages of the prior art while providing a uniform pattern of illumination. See Ishikawa et al, column 3.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the optical device having a means in the form of a prismatic configuration formed on the entrance surface of a light control plate as provided by the prior art by making at least one slope or side which includes the (second) exist slope of each prism of the prismatic configuration as a roughed surface as suggested by Ishikawa et al for the purpose of controlling diffusing light with substantially uniform manner. It is also noted that while Ishikawa et al do not clearly state that the formation of roughed surfaces in the prismatic configuration of the light control plate will reduce the effects of the reflecting member; however, one skilled in the art will recognize that (s)he will apply/make roughed surface(s) on one or both slopes of each prism and in particular on at least the slope which causes the light effects of the light reflecting element as a roughed surface for the purpose of eliminating such effects because such use of roughed surface(s) on one or both slopes of each prism of the prismatic configuration as suggested by Ishikawa et al will make the conventional device described in pages 1-5 and shown in figures 11-12 have a structure which is very similar to that of the device as claimed; therefore, it is expected that the combined product will yield the same result, i.e., reduction the effects of the light reflecting plate used in the device.

Response to Arguments

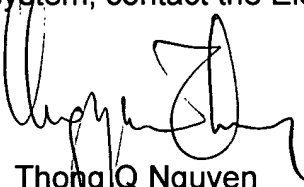
9. Applicant's arguments with respect to claims 4-6 and 9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Nguyen
Primary Examiner
Art Unit 2872
